

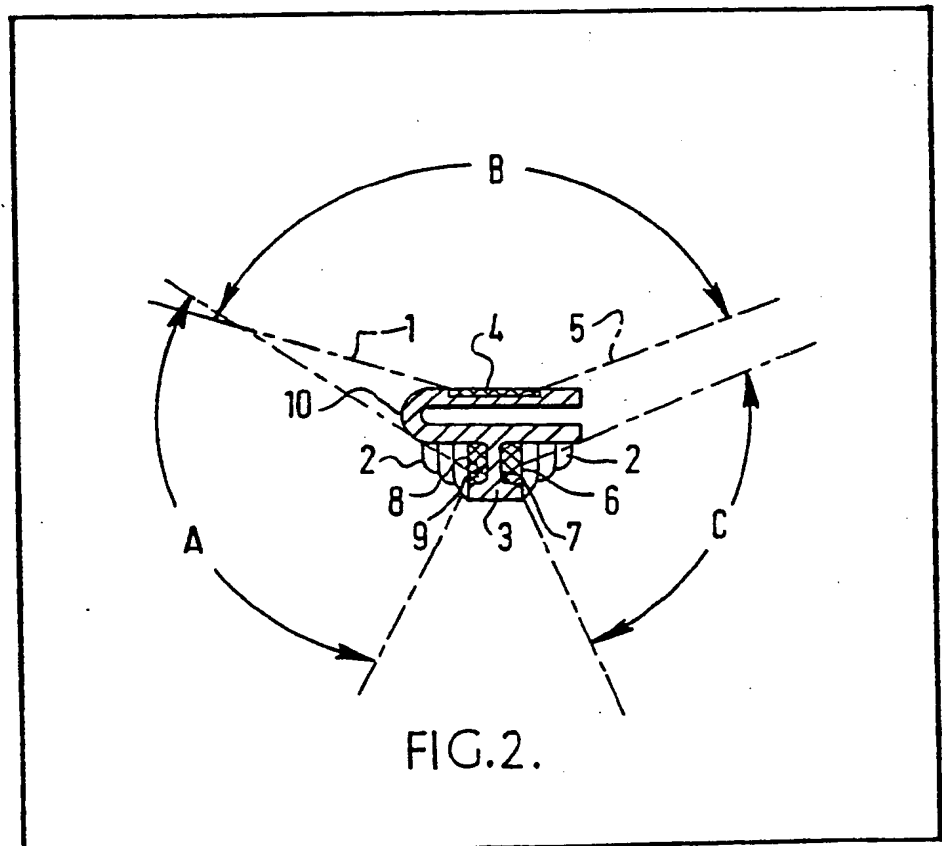
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(54) Vehicle door guards

(57) A reflective door guard is formed as a channel-shaped strip 1 with outer transverse grooves 2 and a longitudinal impact-resisting rib 3. A red reflector 4 is embedded in the inner face 5, an amber reflector 6 is located on a forward surface 7 of the

rib 3, and a red reflector 8 is located on rearward surface 9 of the rib 3. With the door closed, the reflectors 6 and 8 show to front and back. As the door opens, reflector 4 becomes visible before reflector 8 becomes obscured, looking from behind the vehicle. Two or more linked guards can be provided.



The drawing originally filed was informal and the print here reproduced is taken from a later filed formal copy.
The print takes account of replacement documents later filed to enable the application to comply with the formal requirements of the Patents Rules 1978.

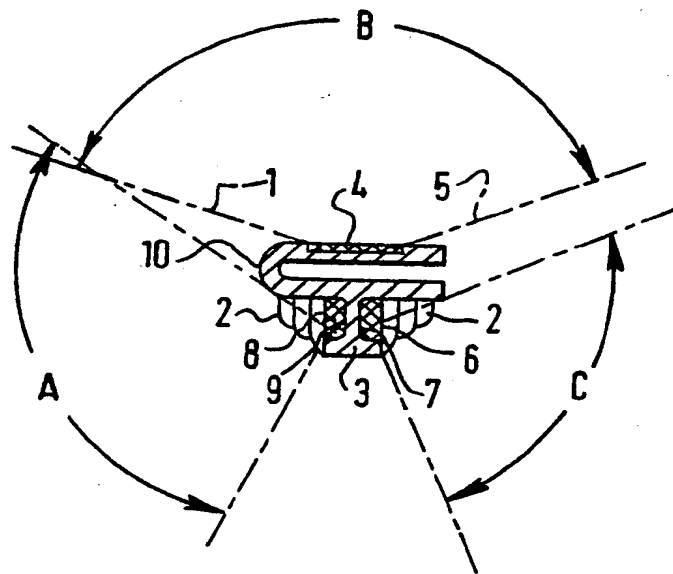
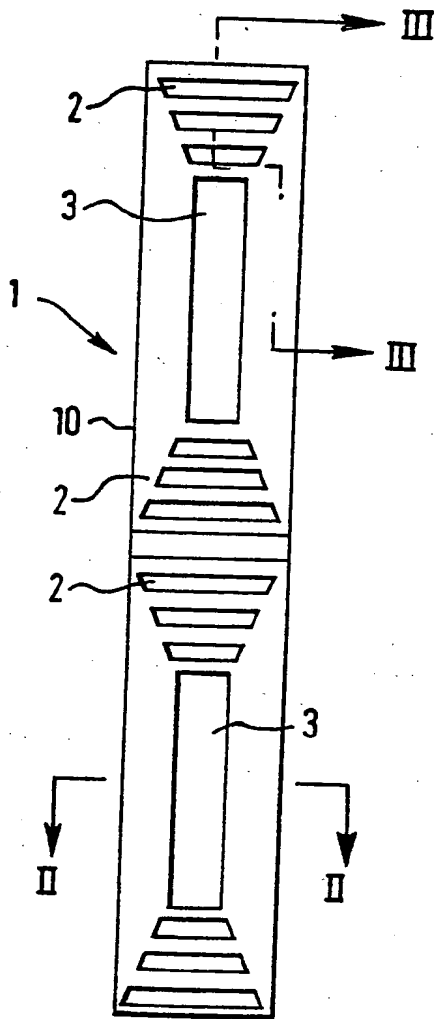


FIG.2.

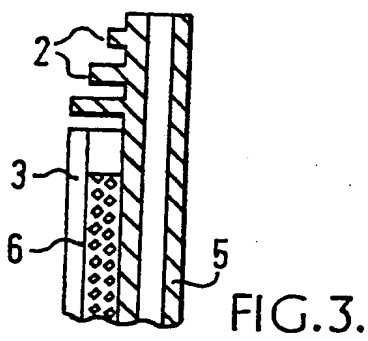


FIG.3.

SPECIFICATION

Door guard

This invention relates to a door guard for a motor vehicle.

It is well known to provide a vehicle door guard in the form of a strip of polymeric material of a channel shape possessing resilient walls. This strip is fitted with the mouth of the channel over the edge of the door, where it grips by virtue of its own resilience.

The purpose of such a door guard is twofold. Firstly, it absorbs impact of the door when this is opened carelessly against another vehicle in a parking lot, or against some other obstruction. Secondly, it is usually visually prominent to provide an indication of the position of the door edge. This can be done by making it of luminously pigmented material, but more often the strip is made reflective, or provided with reflective elements attached to one or both outer faces.

The present invention is concerned with an improvement in this last-mentioned type of reflective vehicle door guard.

We have observed that such reflective door guards can possess two interrelated problems. Firstly, the outer reflectors can hit a nearby obstacle and shatter if the door is opened carelessly. Secondly, if the door is only opened to a small extent, it can still cause obstruction but allow the reflective elements to lie at an angle such that the inner reflector is not operative in respect of lights coming from behind the vehicle, whereby no warning of the obstruction is given. Protecting the reflector elements by suitable embedment against impact exacerbates this "angle of reflection" problem, so that the two problems are interrelated.

The present invention consists in a reflective vehicle door guard in the form of an integral channel-shaped strip of resilient synthetic polymeric material, suitable to grip by the walls of the channel the edge of the vehicle door so as to define a face normally outside the vehicle and a face normally inside the vehicle: wherein the normally inner face has at least one reflective element embedded therein with a visible face thereof parallel to the said inner face, and the normally outer face has a protective rib extending along part of its length and having a forward-facing surface and a rearward-facing surface, each such surface being provided with at least one reflective element whereby as the door is opened the reflective element on the rib rearward-facing surface remains visible from behind the vehicle until the reflective element on the inside face becomes visible.

With such a construction the rib protects the outer face reflectors against impacts, and the combination of the two rearward reflectors (one on the inner face of the open door, and one facing backwards on the shut door) ensures that there is no range of door angles where there is no effective reflection.

The door guard strips can be provided as

individual units or as a linked sequence of two or more units depending on what length of door edge is deemed to need protection.

The invention will be further described with reference to the accompanying drawings, in which:—

Figure 1 shows a top view of two linked units mounted on a door edge,

Figure 2 is a section along line II—II of Figure 1.

Figure 3 is a section along line III—III of Figure 1.

A reflective door guard unit consists of a channel-shaped strip 1 with a transversely grooved outer surface 2 (see also Figure 3) provided with a longitudinal central rib 3 over most of its length, this rib merging at the ends into the transverse grooved construction 2.

This door guard is provided with an embedded red reflector 4 on its inner face 5, a forward-facing amber reflector 6 on a forward-facing surface 7 of rib 3 and a rearward-facing red reflector 8 on a rearward-facing surface 9 of rib 3.

Rib 3 is of sufficiently sturdy construction that an impact of the door guard (not otherwise absorbed by the grooved outer face 2) is taken up by the rib and does not break the reflectors 6 and 8.

When the door is shut, reflected light is visible from a conventional internally-faceted reflector 8 over the arc A as shown in chain dotted lines in Figure 2. As shown, this is governed to some extent by the interference of the end region of the channel at 10, and if the reflector 8 were closer to the end region there would be less interference.

When the door is fully open the reflected light from internally faceted reflector 4 is visible over arc B.

Since arcs A and B overlap, the reflector 8 is still significantly visible by the time reflector 4 first becomes visible on progressive opening of the door. Thus, in distinction from the prior art there is no angle where no reflection is visible. The forward-facing reflector 6 has a reflective arc C such that all normal angles of door opening still provide a visible reflection to an observer in the other direction, as necessary for example in confined spaces such as parking lots.

Claims (filed on 16 June 1982)

1. A reflective vehicle door guard in the form of an integral channel-shaped strip of resilient synthetic polymeric material, suitable to grip by the walls of the channel the edge of the vehicle door so as to define a face normally outside the vehicle and a face normally inside the vehicle: wherein the normally inner face has at least one reflective element embedded therein with a visible face thereof parallel to the said inner face, and the normally outer face has a protective rib extending along part of its length and having a forward-facing surface and a rearward-facing surface, each such surface being provided with at least one reflective element whereby as the door is opened the reflective element on the rib rearward-facing surface remains visible from

behind the vehicle until the reflective element on the inside face becomes visible.

2. A reflective vehicle door guard in the form of two or more units as claimed in Claim 1 integrally

5 connected end to end.

3. A reflective vehicle door guard as claimed in Claim 1 and substantially as herein described with reference to the accompanying drawings.

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